

ABSTRACT OF THE DISCLOSURE

5 A piston type pumping apparatus comprises a vertically oriented cylinder having a top and
a bottom with a first aperture. There are first and second passageways for liquid in the
cylinder at the top and bottom respectively thereof. A piston is reciprocatingly mounted
within the cylinder and has an area against which pressurized fluid acts in the direction of
movement of the piston. A hollow piston rod is connected to the piston and extends below
the piston and slidably through the first aperture. There is a reload chamber below the
10 cylinder. The piston rod extends slidably into the reload chamber and has a third
passageway for liquid communicating thereto. A first one-way valve is located in the third
passageway. There is also a fourth passageway that extends from the reload chamber to a
source of liquid to be pumped and a second one-way valve therein.

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